

# Facilitating Heart Transplant Candidate Evaluation throughout Ohio

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## Abstract

The Ohio Solid Organ Transplantation Consortium (OSOTC) has a mission to ensure equitable access to transplant services to those most likely to benefit, regardless of personal resources, by enforcing the UNOS uniform selection criteria. The University of Cincinnati's Institute for Health Policy and Health Services Research (IHPHSR) has implemented a secure internet-based system to replace the OSOTC's existing fax-based procedures. This system meets both the patient evaluation and basic research needs of the OSOTC.

## Problem

Since its inception in 1984, the OSOTC maintained limited patient data in a stand-alone database on a local workstation. This database contained minimal patient demographics and medical information, needed to enforce the UNOS uniform selection criteria. But this database housed fewer data elements than desired for research purposes.

The consortium relied on faxed forms to communicate patient data and candidate evaluations among the central office and the participating transplant centers. This method limited the consortium's ability to register and evaluate transplant candidates in a timely and convenient manner.

## Purpose

To overcome these limitations, the IHPHSR proposed creating a patient data registry, named The OHIO Project, that would provide an extensive data-store to accumulate detailed patient data for benchmarking, program evaluation, medical decision-making, and many other research agendas, and to facilitate faster turn-around for candidate evaluation, all through the following features:

- Patient registration and follow-up
- Candidate evaluation and voting
- Electronic notifications and reminders
- 24 x 7 secure internet access

*Patient registration and follow-up.* The system provides web forms to collect patient registration, listing, follow-up, and transplant data. It also accepts data uploaded in a predefined format. The system takes care of basic calculations and flags abnormal lab values. Coded values can be managed by the OSOTC central office. Coded values greatly enhance the value of querying the data for research purposes.

*Candidate evaluation and voting.* The system hosts an anonymous question and answer bulletin board for evaluators from the participating consortium centers and a "voting booth" where they can submit their decisions on a candidate's adherence to the uniform selection criteria. The OSOTC central office is notified by the system once all votes have been submitted, and uses the system to certify the final vote.

*Electronic notifications and reminders.* New patient notifications, vote certification notifications, patient follow-up reminders, vote reminders, and other messages are automatically e-mailed by the system to appropriate users. The system maintains a log of all notifications and reminders it sends.

*24x7 secure internet access.* The IHPHSR's HealthNet Gateway portal provides round the clock, secure, 128-bit encrypted access to The OHIO Project system from any location with access to the internet. Additional security is provided by multi-level firewalls, and offsite database backups.